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Le Corbusier and the mysterious "résidence du président d'un collège"

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Abstract: At the very end of his travel to United States, Le Corbusier conceived and designed a modern villa that he lately inserted in the third volume of his Oeuvre Complete with the title 'Résidence du président d'un college près Chicago' and few words below describing it. He interpreted a simple request for suggestions by Joseph Brewer, the president of the Olivet College, Michigan, into an actual commission for a new house that responded to the kind of works he expected from his American admirers. He possibly designed it in a few hours' time from Kalamazoo to Chicago but the autograph hand-drafted plans and bird's-eye perspective view in the Oeuvre Complete congruently describe a well-thought project showing a number of affinities with his most celebrated European houses. The villa can be considered as an aware modular assemblage of parts that he had previously designed or even built, tied together by a long and suggestive promenade architecturale, to offer the "timid" American people a sort of full scale model to introduce them to his vision of modern life.

By analyzing Le Corbusier's sketches and conjecturing both dimensions and missing elements from previous designs, a threedimensional digital model has been elaborated to virtually visit the résidence and understand its fictive and educational value.

Keywords: Le Corbusier; Joseph Brewer; Olivet College; Promenade architecturale; Intertextuality; Digital Model.

1. America calling

"Un président de collège, imbu d'idées modernes, a désiré présenter à son comité les plans d'une maison dans laquelle il puisse recevoir ses élèves dans une ambiance favorable. La maison est nettement classée, au premier étage, en un salon – bibliothèque – terrasse et rampe descendant au jardin. Dans la soupente, un lieu intime: le cabinet de travail avec un jardin clos. Au rez-de-chaussée : la chambre à coucher du président; trois chambres d'hôtes, une communication direct avec l'entrée et, d'autre part, avec le bain de soleil à l'étage." Le Corbusier¹

The *résidence du président d'un collège* is the only project designed by Le Corbusier during his journey to the US from October, 21 to November, 28 1935. The notebooks with his travel notes were lost, as evidenced by the gap between the carnets of Algiers of 1933 and those of Rio de Janeiro in 1936² and the only known drawings can be found on *When the cathedrals were white*³, the book that sums up his American experience.

References to United States, the vertical city, its innovative production criteria, Fordism and, more generally, to the promises of a young and enterprising land, were present in the writings of Edouard Jeanneret since the time of *L'Esprit Nouveau*: in their geometric sincerity American industrial architectures had offered the young architect some of the most effective images to groom the anachronistic European academicism with. These ideas were obviously affected by the phenomenon of the so-called French Americanism that in the twenties conveyed

¹ Bill, Max: Le Corbusier. Oeuvre Complète. Volume 3. 1934-38. 14th edition, Basel – Boston – Berlin: Birkhäuser Publishers, 2006, p. 133.

² See: *Le Corbusier Sketchbooks*, New York – Cambridge (Mass.): Architectural History Foundation and the MIT Press, 1981-1982, vol. 1, pp. 29-31.

³ Le Corbusier: Quand les cathédrales étaient blanches, voyage au pays des timides. Paris: Plon, 1937.

the idea of an implicit superiority of European culture, contributing indirectly to the prejudices that marked negatively Le Corbusier's experience in America⁴.

America gradually discovered Le Corbusier through his urban projects, his first villas and books published between 1923 and 24⁵. The Architecture League of New York, led by Raymond Hood, tried to invite him in 1929 by offering a contribution between 2000 and 3000 \$, but the Swiss architect was already busy with his tour in South America and responded too late. In the same years he had been contacted by the American entrepreneur Melville Easterday and cultivated for some time hope to build an office building and a house in Oklahoma City⁶. In 1930-31 his cachet had risen to \$3,000 for a conference in New York and \$500-600 for conferences in other cities, far beyond the possibilities of the League. As the director of Columbia University's School of Architecture, Joseph Hudnut promoted in 1933 a third attempt at inviting Le Corbusier but it also failed despite the support offered by MOMA⁷. Next year a fourth initiative involved Albert Frey and Carl Schniewind, a couple of Le Corbusier's friends, and it was the prelude to his trip in the fall of 1935. After the crisis of 1929 economic conditions were difficult both in Europe and in America and the payments he was offered were always lower than expected, but they could be balanced both by limiting the speaking tour to a few cities and by the opportunity to build something in America.

1.1 Sailing to USA

On October 16, 1935 Le Corbusier sailed from the port of Le Havre with a first-class ticket on the *Normandie*. He had three kinds of purposes before him: to be known through his lectures; to get commissions to build in America; to document US cities and factories in order to arrange further publications. The cruise did not offer him the same entertainment and emotions of his previous journey to Rio de Janeiro, but on October 21, when he arrived at New York, he found Marguerite Tjader Harris waiting for him. He had met the writer in Vevey, in his mother's home and had designed a villa for her in a plot nearby (FLC 9375). Mother of a child and divorced from her husband Overton Harris, Marguerite was muse and discrete confidant of Le Corbusier during his stay in the US. Despite her occult and uncomfortable role, "Marguerite can be fully appreciated as the person who enabled Le Corbusier to experience the realities of modern life and culture in America that would validate his Radiant City thesis." In her company, New York appeared to Le Corbusier "overwhelming, amazing, exciting, violently alive – a wilderness of stupendous experiment toward the new order that replaces the current tumult". Marguerite showed him New York metropolitan life and opened her home in Darien, Connecticut, and her shack on the island of Pratt, Long Island as a safe haven: their happy days in the *Baraque* – that's the way Le Corbusier nicknamed it – were possibly the cause of the famous *Cabanon* in Cap Martin. Moreover, their relationship

⁴ Hitchcock, Henry-Russell: "Le Corbusier and the United States". In *Zodiac*. 1966, N° 16, pp. 6-23; Bacon, Mardges: *Le Corbusier in America. Travels in the Land of the Timid*. Cambridge (Mass.) – London: The MIT Press, 2001.

⁵ Pond, Irving: "From Foreign Shores". In *Journal of the American Institute of Architects*, December 1923, N°11, p. 475; March 1924, N° 12, p. 122.

⁶ Fondation Le Corbusier conserves seven letters testifying these contacts. Bacon, op. cit., p. 330, note 182.

⁷ After the success of the exhibition *Modern Architecture: International Exhibition* curated by Philip Johnson and Henry-Russell Hitchcock (February 9 to March 23, 1932), MoMA was interested in inviting one of the leaders of European Rationalism to New York.

⁸ Bacon, op.cit., p. 57.

⁹ Le Corbusier: When the Cathedrals Were White: A Journey to the Country of Timid People. New York: Reynal and Hitchcock, 1947, p. 45.

probably influenced his decision to stay at Gotham Hotel in New York even after finishing his local lectures, deleting all his commitments on the West Coast¹⁰.

1.2 Le Corbusier in the Midwest

While New York had offered Le Corbusier the opportunity to experience and study a metropolis, especially from its taller skyscrapers, East Coast cultural centers opened the doors of the liberal establishment, showing all the contradictions of the "new world". In the lectures he presented in his first month in America, Le Corbusier faced the cultural elite of Hartford, the uninhibited female students of Vasar Collage and the anachronistic Beaux-Arts atmosphere at MIT, where his presence proved decisive for the modernist breakthrough of the school of architecture¹¹.

After mid-November he began to visit the hinterland and, in particular, the Midwest. He moved to Detroit, Bloomfield Hills, Kalamazoo, Chicago, Madison, and finally, again Chicago¹². In this territory dotted with those factories and barns that had fuelled some of his earlier speculations on industrial architecture, his attention turned away from journalists and academics to focus on entrepreneurs and industrialists while the topics of his lectures focused on production processes and their social consequences in urban areas. Those days were marked by the favorable reception Saarinen offered him in Cranbrook as well as the experience of the Ford assembly line in Detroit that convinced him to claim that "Houses of future will be made in factories"¹³.

On November 22nd, on the way to Kalamazoo Joseph Brewer suggested to Le Corbusier to stop briefly at Olivet College, where he was president. Accompanied by some members of the academic staff, he proposed to Le Corbusier the possibility of designing a new house of the president, since years before a fire had burnt down the old one. Le Corbusier considered Brewer a reliable interlocutor. During the years Brewer had worked as an editor and publisher in New York (1925-33), he had edited the American editions of Le Corbusier's books¹⁴ and had early contracted with him about a book on American Architecture to be published after his travel. He had been a member of a circle supporting MoMA's activities in favor of modern architecture and "under the presidency of Joseph Brewer, Olivet College had an extraordinary life as center of education in the arts" Brewer himself revealed about their quick inspection into the college and the nature of his proposal. "I took him up to the site and asked if he would be interested to do a quick sketch for a new house. I explained that the College had no money, that a gift would have to be sought, and I could give no assurances of anything ... he made some notes of the requirements as I saw them and said he would think about it". To Brewer Le Corbusier

¹⁰ Bacon, op.cit., p. 87.

¹¹ Gordon Bunshaft revealed that after that lecture, "Corbu's books became our bible. What counted more in those books were the drawings, illustrations, and plans, not the written word". Quoted in Bacon, op.cit., p. 97.

¹² Program of lectures of the last part of travel consisted in: November 21, Cranbrook University; 22: Kalamazoo Institute of Arts, 25: Arts Club of Chicago and Renaissance Society, both in Chicago; 26: Memorial Union, University of Wisconsin, Madison; 27: Illinois Society of Architects and American Institute of Architects, both in Chicago. From Bacon, op. cit., p. 314.

¹³ Quoted in Bacon, op. cit., p. 105.

¹⁴ Brewer & Warren had published *Towards a New Architecture* in 1927, from the 13th edition of *Vers une Architecture* and *City of Tomorrow and Its Planning* in 1929 from the 8th edition of *Urbanisme*.

¹⁵ Robie Maculay, quoted in Saunders, Max: *Ford Madox Ford: A Dual Life. Volume II: The After-War World.* Oxford: Oxford University Press, 1996, p. 504.

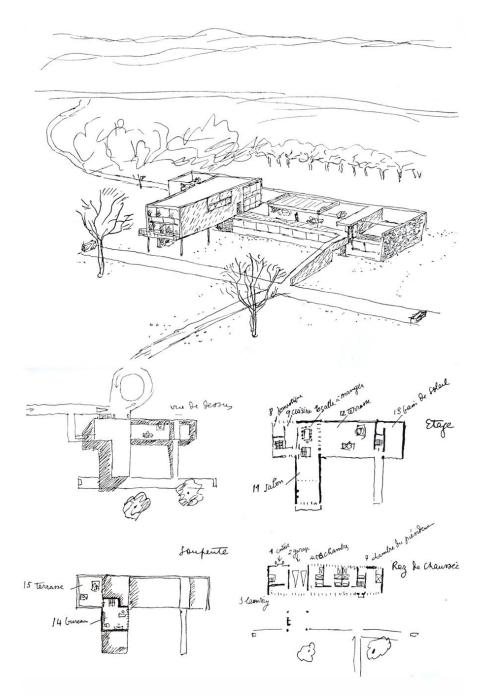
¹⁶ Quoted in Bacon, op. cit., p. 108.

seemed elusive and inscrutable. "He looked around the place, chatted affably enough but was critical and slightly aloof (in fact, rather Swiss!) and clearly wanted to get on".

Two days later, on November 24, 1935 – exactly 80 years ago! – Le Corbusier produced a design that surprised Brewer, for he did not expect any project but just suggestions. "I was surprised when I got the drawing. He sent it to me from Chicago. He might have done it on the train" Brewer's proposal was exactly the kind of commission Le Corbusier hoped to receive during his American journey. It had arrived at the very end of his travel and, as often happened, was emphasized by his ambitions up to take on the characteristics of an architectural manifesto.

¹⁷ Ibidem.

¹⁸ Ibidem.



1. Le Corbusier, Bird's eye view and plans for la 'résidence du président d'un college', 1935 (Le Corbusier; Jeanneret, Pierre: *Oeuvre Complète. Volume 3. 1934-38*, ©FLC-ADAGP).

2. The President's House

The two sheets Le Corbusier published years later in the third volume of his *Oeuvre Complete*, show sketches of the four plans (ground floor, first floor, entresol and roof) with shadows and numbered captions of the functions and a bird's eye view of the house. From these few elements emerge, however, a coherent project for a villa designed for the campus of Olivet College, Michigan (fig.1).

The site suggested by Brewer should be in the south-west part of the campus, close to the old Main Street (US 27) on a low hill overlooking the neighboring valleys (fig.2). This hypothesis is confirmed by two different sources¹⁹ but I am quite skeptical about it. Rooms position seems inconsistent with such a site as the bed-rooms windows would face west and the two large windows of the first floor would face north – the dining room - and east – the living room. A different site, on the east side of the campus, just before a little stream, would instead fit properly with rooms and windows position as well as the other elements recognizable in the sketches.

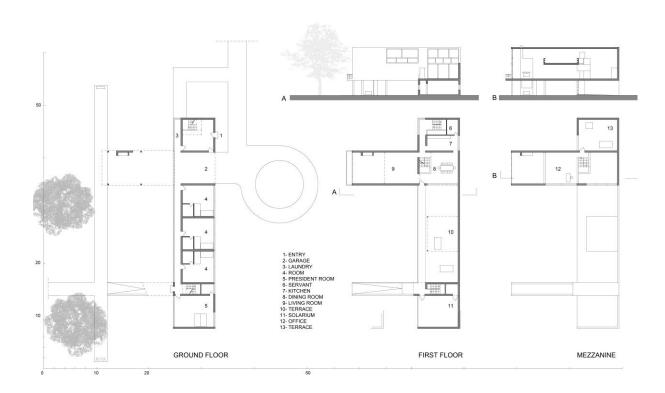


2. Photomontage of the President's House in an hypothetical SW site at the Olivet College (Image source: Googlemap; elaboration by F. Colonnese).

The architect took on the existing network of paths as a Cartesian reference to collocate the rectangle plan of the house. He conceived the house as a barrier to physically demarcate the edge of the campus; thus he placed the public functions of the house on its campus side and the private ones on the other side. He accordingly ordered the circulation flows: he placed a main entrance in the back façade, near the garage, where the street ended with a roundabout to facilitate cars movement while a second door is on the public side, hidden under the ramp leading directly on the *étage*. Then he organized the functions on three levels. In the ground floor, besides the

¹⁹ Bacon, op. cit., p. 348, note 185.

entrance hall and the garage, he placed the four bedrooms with bathrooms served by a long corridor that isolated them from the campus. On the upper floor Le Corbusier arranged a roof garden and a private solarium, divided by the volume containing the staircase raising from the ground floor. A long parallelepiped, reachable both by the internal staircase and through the external route along the ramp and the garden, contained the double-height dining room and a living room while a kitchen and service room were in the adjacent volume. Another staircase by the entrance led to the central mezzanine where Le Corbusier placed the president's studio with an exit leading to a secret patio.



3. Reconstruction of the President's House: plans and sections (drawing by F. Colonnese).

2.1 Modeling the house

A reconstructive digital model has been elaborated by the author together with the engineer Silvia Gioja after Le Corbusier's sketches, supported by the evidence that only little inconsistencies can be found between plans and perspective, like the door in the solarium missing in the latter sketch or the *jardin clos* missing in the roof plan. The model bases on a modular re-organization of the plans drawn by the architect and corrected through what can be deduced from the perspective as well as an accurate constructive analysis. A previous attempt at reconstructing the house project had been proposed by Masuishi and Ando in 2001²⁰, through 1:200 scale plans and a cardboard model, and we sincerely owe part of this first phase to their proposal, but further hypotheses have been formulated to develop the sketches into a coherent three-dimensional model showing both exteriors and interiors at a 1:50 scale average definition. For example the sketches do not explain clearly the form of the staircase separating the living from the dining room. The solution proposed took inspiration from the pulpits along the staircase of Maison La Roche. In absence of sections, each floor is assumed as 270 cm high, like Villa

²⁰ Masuishi, Shinichi; Ando, Tadao: Le Corbusier. Houses. Tokio: TOTO, 2001, pp. 250-252.

Stein ground floor: this choice allowed the author to give the main volume a square vertical section. Some elements have been detailed in relation to Le Corbusier's architectural production, like the glass wall of the garage inspired by the ground floor of Villa Savoye, while others have been added as a logical conclusion to what can be seen in the sketches. Thus fireplaces have been designed according to renewal project for Villa Stein Le Corbusier was working on in the same months while a (short) chimney has been added on the roof. The back elevation has been designed mostly imitating the main one, with strip windows for all the rooms; both the shorter side walls were supposed to be in masonry. Finally a Villa Stein-like metal banister has been added on the ramp and the *toit jardin*.

Apart an exception, the views after the digital model have been generally rendered in greyscale to avoid hazardous hypothesis about the colors of the walls both for Le Corbusier used to decide the *polychromie* architecturale only in the final stages of the building and to let the reader focus primarily on the light and space effects.

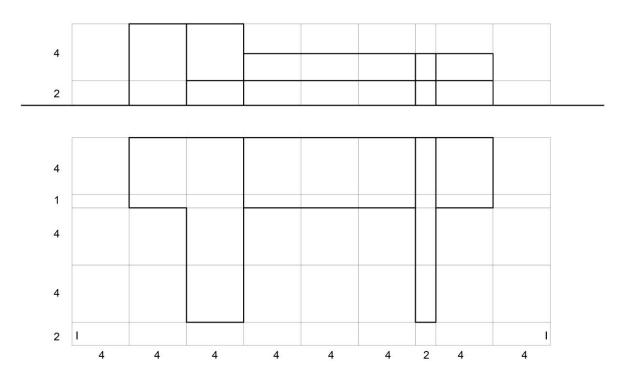
2.2 Early considerations

As evidenced by the reconstructive model, the structure appears a reworking of the Maison Citrohan model through the experience of Parisian villas but rigidly organized in modules (fig.4), according to a policy that dates back at least to the studies of the working-class district of Pessac a decade before. Even the sketched plans evidence the division into cells and semi-cells, to which double heights and stairs accorded. In the house Le Corbusier had designed for Marguerite Tjader Harris five years before, he had demonstrated his ability to build a villa with standardized structures on the steep slope of Vevey where a forest of pilotis supported three rectangular volumes mutually orthogonal and hinged on the staircase tower. Perhaps his attendance of the woman combined with both the direct experience of the Ford's assembly line and the short time to design the house, convinced him to follow such a way.

What does this project means as part of Le Corbusier's travel to United States? It might look like a manifesto drawn up for the benefit of American people but certainly cannot be considered as a perfect application of his five points. *Pilotis* are still supporting the main volume but, at the same time, the bird's eye view (fig.5) reveals that the end wall is in masonry, as already experienced in the Swiss Pavilion and the houses in Les Mathes, for example. There is no trace of the free plan, although during the lectures he highlighted its importance, emphasizing even the use of mobile partitions²¹. On the other hand, the *fenêtre-en-longueur* still reminds the gains of the free façade as well as the principle of the roof-garden is applied extensively, well beyond the actual possibilities of using open spaces with the climate of Michigan.

The house is rather the expression of a moment of transition between the idealism of the heroic period and local contingencies, in response to both changing economic conditions and his growing interest towards local building techniques and materials. It appears as a malicious synthesis of regionalism, vernacular, purism, avant-garde and the International Style, which was intended to educate timid or convert the *infidels*.

²¹ "When I do a house, I use *les cloisons mobiles*, movable partitions ... by a free plan". Quoted in Bacon, op. cit., p. 89.



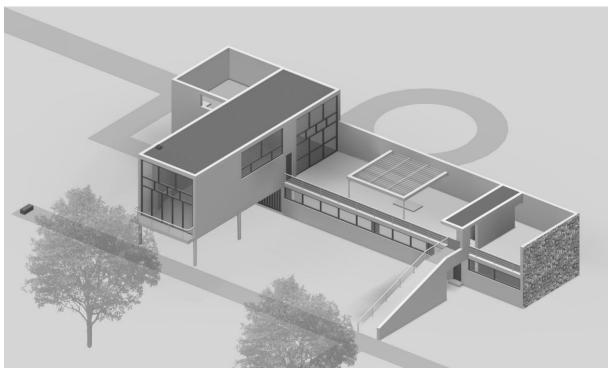
4. Modular scheme of plan and section of the President's House reconstruction model (drawing by F. Colonnese).

3. The House as an aesthetic machine

Apart the ordinary functions related to domestic life that can be only imagined from Le Corbusier's sketches, the house for Joseph Brewer is conceived to play at least four aesthetic functions at the same time: it is a model, a symbol, a theater, and a machine to (teach how to) see.

First, the house is a model to satisfy the US conditions of production and commissions and to direct the construction criteria towards standardization and prefabrication. Its volume was a direct expression of its modular skeleton but plastered surfaces diluted the effect of repetition of forms. The pillars and the larger windows manifest the module while the uprights of windows and balustrades exhibit sub-themes and rhythmic variations. The building appears as a villa specifically designed for a client and, at the same time, it suggests the implicit potential of other combinations of the same constituent elements, like a full-scale model useful to experiment the new architecture potentials and to convey both the process that generated it and its alternative outcomes.

The house of the president was the building of the highest authority of the campus, which is inevitably an architectural symbol. The archetype (unconsciously?) chosen by Le Corbusier is the Acropolis on which reside the deity in charge of the government of men. The basement becomes a podium partially clad in stone, as if it were part of the ground, and the parallelepiped transfigures into a temple supported by slender columns and deputed to administration and control. Consistently its windows look like open eyes to watch literally and metaphorically on campus life. Interpreting the window as a face, the entire volume of the building might well suggest an animal guarding the campus by turning its long neck in the same direction of the ramp / tail. But of course the whole composition could be interpreted as an architectural allegory of the cultural superiority of Europe over America, with the white perfect monolith left onto the altar by the priest of the *new* architecture for a *new* knowledge, not too differently from Stanley Kubrick's black monolith in 2001: A Space Odyssey.



5. Axonometric view from the President's House digital model (picture by F. Colonnese and S. Gioja).

The house was also the place where students could meet the president. Thus the basement not only provided a physical limit to the campus, but appeared as a large stage on which the students' ritual ascension to the president could come to life and theatrically manifest. The back tall wall was obviously conceived for protecting people and plants from the wind but also to define a scenic box and emphasize the movements of the students / actors on the stage while a light textile structure, like a canopy, fixed the focus of the scene. Obviously the rite was choreographed by the elements of the promenade architecturale. Students would indeed walk the ramp, direct continuation of the campus avenue, up to the level of the roof garden and then would follow a transversal path, remaining in sight until they enter the parallelepiped.

Such a mise-en-scene of a procession along ramps and terraces, which partially replicated the route of the Cité de Refuge, will emerge again in highest spiritual content projects, such as the church of Saint Pierre at Firminy, the Palais des Assemblées at Chandigarh²² or the Convent of La Tourette, in which sentiers aériens would favor the "vision of monks in filing along the ramp, chanting psalms right up to the cloister in a spectacular staging of liturgical life"23. In the route at Olivet College, students were thus supposed to play the kinetic and cinematic representation of community life (or perhaps even a parody in the form of an assembly line...). After reappearing behind the square window projected on campus, students would be framed by the enclosure, looking like acting in a floating theater box or one of those television sets that began to be commercialized in the same years.

patrimoine/Centre du monuments nationaux, 2008, pp. 151-176. ²³ Potie, Philippe: Le Corbusier: Le Couvent Sainte Marie de la Tourette. Basel – Boston – Berlin: Birkhäuser; Paris: Fondation Le Corbusier, 2001, p. 102. Le Corbusier's second sketch for La Tourette (FLC 1149 of 25.05.1954), rejected by the religious, entirely focused on the idea of a monumental ramp to integrate the cross central distribution to set up a system of sentiers aériens.

²² Curtis, William J.R.: "Abstractions and representations. Le Capitol de Chandigahr, paysage de symboles". In Le Cahiers de la recherche architecturale et urbaine. "Le Corbusier. L'atelier intérieur". Février 2008, N° 22/23. Paris: Editions du

Observing the plants, it is clear that if only Le Corbusier had wanted, he could have solved the public access to the President's House in a much quicker and unnoticeable way. Instead he chose to put a ramp far from the box in order to lengthen the access path and turn it into a theatrical event. The house for Le Corbusier was a place of action: his boxes were containers for dramas, a stage for the comedy of modern life²⁴, where to see and be seen in constant motion. Something like that happened in the same years in the houses Adolf Loos designed for Möller, Tzara and Müller²⁵, with the dining room in form of raised stage with a curtain but this aspect was never at the expense of family intimacy. Le Corbusier rather neglected often his customers' requests for privacy. He used to design houses with a theatrical and voyeuristic quality, according to a sort of *mediatized domesticity* as coined by Charles Rice²⁶, with whom Le Corbusier tried to respond to the changing sentimental needs of a bored society. A letter of 1937 in which Emilie Savoye expressed to Le Corbusier his opposition to the people the architect sent constantly to visit the villa, reveals that he considered the houses he had designed like a public building or, at least, open to his both actual and potential clients, with the result that dwellers were reduced to actors for the benefit of their (unwanted) guests²⁷, like in a concept art event.

4. The Promenade Architecturale

The idea of *promenade architecturale* Le Corbusier arranged since the days of the house-atelier for the painter Ozenfant²⁸, can be defined as an aesthetic kinematic device to explore space and architectural surfaces as well as to unveil the landscape through the architectural frame. After Princeton and Vesser, also his lectures in Kalamazoo and Chicago focused on this concept. After quoting graphically basic geometric solids on the long sheets hanged on the wall, Le Corbusier analyzed the issue of perception of a viewer moving in space by drawing a double sinusoid touching a number of polygons. This schematic plan view of an undulating route that crosses various rooms is the trace of the promenade: "the Bonhome, the visitor, drawn in silhouette, is the true subject and actor of the architectural experience; the route [is] the instrument through which the visitor experiences the situations that affect his senses, from the plastic forms that crosses his eyes"²⁹. Below, a section of three rooms of different height and proportion exemplified the question of relativity of spatial experience as dependent on the direction of walk and the crossing sequence. On the right Le Corbusier summed up in six cases the relationship between the human body and different ground lines, while three perspective sketches showed the way the size and position of the openings affect the perception of interiors.

Place, spatial sequence, landform, views, epiphany of space through light, architectural experience: in a few diagrams Le Corbusier synthesized the ingredients of his architecture conceived in form of promenade. The President's House for Joseph Brewer seems to be a sort of compendium of this idea that can be appreciated only by walking it, albeit virtually.

²⁴ Damisch, Hubert: "I teatrini della vita moderna". In *Le Corbusier. Enciclopedia*. Milano: Electa, 1987, pp. 292-308.

²⁵ Colomina, Beatriz: "Intimacy and Spectacle: the Interiors of Adolf Loos". In AA Files, Autumn 1990, N° 20, pp. 5-15; "The Split Wall: Domestic Voyeurism". In Colomina, Beatriz (Ed.): Sexuality and Space. New York: Princeton Architectural Press, 1992, pp. 73-130; Colonnese, Fabio: "Ornamento, delitto e colore". In Rossi, Maurizio (Ed.): Colore e colorimetria. Contributi Multidisciplinari, vol. VII A. Roma: Maggioli Editore, 2011, pp. 207-214.

²⁶ Rice, Charles: *The emergence of interior. Architecture, Modernity, Domesticity*. New York: Routledge, 2007, p. 112.

²⁷ Colomina, Beatriz: "Vers une architecture médiatique". In *Le Corbusier – The Art of Architecture*. Weil-am-Rhein: Vitra Design Museum, 2007, p. 261.

²⁸ Benton, Tim: *The villas of Le Corbusier and Pierre Jeanneret 1920-1930*. Basel; Boston; Berlin: Birkhäuser, 2007, pp. 35-42.

²⁹ Quetglas, Josep: "Con el publico en sùspenso". In *Circo*. "El corazón del tempo". Nº 91, 2001, p. 6 (translated by the author).



6. Rendered view from the President's House digital model with hypothetical chromatic effect (picture by F. Colonnese).

While the students approach the house, it looks like an architectural unit, but the eccentric position of the avenue to the ramp produces a virtual rotation of the long jutting volume. Before arriving at the ramp, a last transversal street cross the avenue but it looks blocked by barriers that seem to have the task of constraining the visual domain from which the building can be observed (fig.6). The ramp, which Le Corbusier often placed parallel to the body of his buildings, appears here placed perpendicularly to it. In this way, before *appearing* as a sign indicating the way to ascent, it is a connection, a piece of soil raising to join two levels together. The small volume containing the stair to solarium, constitutes the first enigmatic focus at the end of the ramp. Like many picturesque³⁰ gardens, the whole promenade is indeed organized in tranches animated by specific visual foci that are revealed at every passage and change of direction, passing by degrees from the monumental tone of the cantilevered volume to intimate atmosphere of the *jardin clos* (fig.7).

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³⁰ About the picturesque heritage in Le Corbusier's concept of Promenade Architecturale, see: Etlin, Richard A.: *The Romantic Legacy. Frank Lloyd Wright and Le Corbusier*. Manchester: Manchester University Press, 1994; Macarthur, John: *The Picturesque: Architecture, Disgust and other Irregularities*. New York: Routledge, 2007; Bois, Yve-Alain; Shepley, John: "A Picturesque Stroll around 'Clara-Clara'". In *October*, Summer 1984, N° 29, pp. 32-62. Cambridge (Mass.): The MIT Press, 1984. DOI: 10.2307/778306; Colonnese, Fabio: *Movimento Percorso Rappresentazione. Fenomenologia e codici dell'architettura in movimento*. Roma: Officina Edizioni, 2012.



7. Rendered views from the President's House digital model along the promenade (picture by F. Colonnese).

The ramp is quite steep³¹ and abruptly slows the students, altering their pacing. They are then invited to direct their gaze around, focusing on what appears virtually moving without the fear of falling, like on a stair. A few steps later, as their eyes pass over the floor level of the $\acute{e}tage$, the roof garden appears to them as an unexpected revelation of a new world to be explored.

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 $^{^{31}}$ The reconstruction revealed that the ramp would have an inclination of almost 30°, steeper than both that of Villa Savoye (17°) and that of Maison La Roche (27°).

At its top the ramp turns into a short horizontal bridge: it leads under a shaded canopy that seems appositely designed to frame the long parallelepiped and indicate the new direction of the route (fig. 8). From here on the long slab looks like a two-dimensional plane that occupies the whole field of view of the students. Following the tall garden wall advancing gazes penetrate the large square windows into the dining room; then the eyes slide up, to decipher the role of the upper studio window and discovering the existence of an additional floor which becomes the new goal to reach, although it is not yet clear how. Until now the gaze anticipated and addressed the body along an ascending anti-clockwise trajectory that appears a version wider than the one that can be experienced either in Maison La Roche or Villa Savoye.



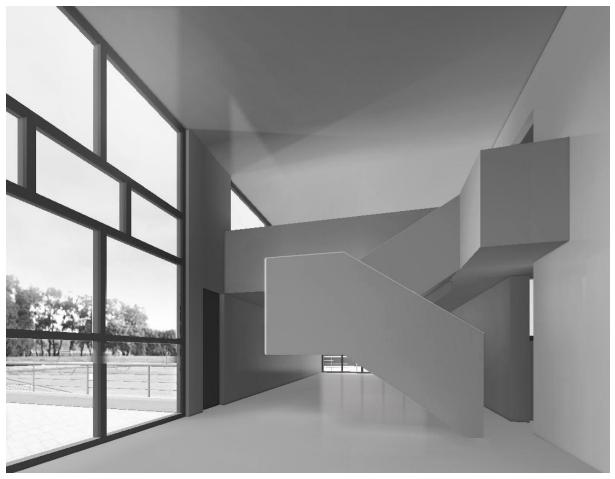
8. Rendered sectioned view from the President's House digital model along the promenade (picture by F. Colonnese and S. Gioja).

The door opens at the connection point between the dining room and the living room, revealing the existence of a staircase (fig.9) and the mezzanine predicted from the outside³². Here the path forks: the students are oriented to the left, called by the light coming from the large window that frames the campus. Friends and colleagues of the president instead have access to the stair that on the way up provides pulpits for looking over the dining room and discerning the roof garden design. From the study of the president one can finally appreciate and review all the way walked up to this point and enjoy a vantage point over the campus, with a floating sensation amplified by the distance between the railing of the mezzanine and the window glass plane. Only after watching the

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³² Perhaps an high window would have revealed the existence of the *jardin clos* from the *sale à manger*, like in Maison Cook, but there is no clue of it in the sketches.

landscape through the architectural frame and becoming aware of the promenade, one can access the final *chambre a ciel ouvert* with only one unfiltered window to the horizon line.



9. Rendered view of the Salle à manger from the President's House digital model (picture by F. Colonnese).

4.1 Representation, Montage and Intertextuality

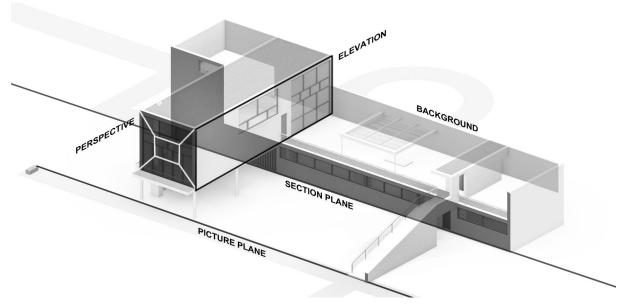
The virtual exploration of the house highlights two aspects that could be qualified by the same term: assemblage. Not only the house is designed as an assemblage of pre-established parts but the *promenade architecturale* unveils it by following the principle of the *montage* as theorized by Sergej Eisenstein³³. Several elements confirm the cinematic conception of this architecture: the existence of precise visual stations along the route; constraints and barriers aimed at defining the unit of space; partitions and window frames designed to suggest a unity of time; the use of the ramp that allows the eye to move rather freely flowing on surfaces apart and staring, a moment later, at close details; the opacity designed to contain the visual field and, on the contrary, the transparency to let the eye penetrate from outside to inside and vice versa. Although the body is not allowed that a linear route, the eye is invited to enrich it with come off, zoom and wide shots that increase the fictive quality and associate precise visual values to bodily sensations, enhancing the spatial experience. As Le Corbusier wrote

³³ See: Bois, Yve-Alain, Glenny, Michael: "Montage and Architecture". In Assemblage, 1989, N°10.

in *Urbanisme*, "The eye should not always be stimulated in the same manner, or it becomes tired; but give it the necessary 'rotation' and change of scene and your walks will be neither tiring nor drowsy". But there is more:

"Behind the eye is that agile and generous, fecund, imaginative, logical and noble thing: the mind"35.

Le Corbusier's pictorial experiences with purist and cubist space gave him not only a peculiar sensibility toward the representation *in* and *of* motion³⁶ but also a further mental level of reading of architecture itself. As observed by Reichlin, in a number of the paintings he depicted in twenties, objects seem to have been extracted from spaces following different modes of representation and then assembled in the same view. A similar ambiguity can be experienced in his architecture, by considering it as an assemblage of parts viewed with different perspective laws and assembled along the architectural promenade which Reichlin properly defined as the "guide to the reading of a work"³⁷.



10. The house as a representation set (picture by F. Colonnese).

The abstraction of its forms announces this fictive character of the house. From a distance the composition reminds Adolphe Appia's geometric scenes Le Corbusier could appreciate during his travel to Hellerau in 1910³⁸ as well as one of those descriptive geometry exercises showing shaded solids onto plinths and inclined planes. The transversal path along the approaching route signs the trace of the ideal perspective plane: by crossing this invisible threshold one leaves the *reality* and move into the *representation* arranged by the architect (fig.10). From this moment on everything starts to appear flat, consisting of two-dimensional planes: even the volume of the house can no longer be seen but in a frontal way. The basement appears instead the result of a vertical section in which the part closer to the viewer has been deleted and four thin pillars have been added to support the long parallelepiped. Such a volume looks like a real declaration of independence from gravity and, therefore, from

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³⁴ Le Corbusier: *The City of Tomorrow and Its Planning*. New York: Dover, 1987, p. 62.

³⁵ Ibidem.

³⁶ See: Colonnese, Fabio: "Note su alcuni disegni "panoramici" di Le Corbusier". In *Disegnare Idee Immagini*. 2012, N° 43, pp. 26-35.

³⁷ Reichlin, Bruno: "Jeanneret-Le Corbusier, pittore-architetto". In Bardati, Flaminia; Rossellini, Anna (Eds.): *Arte e architettura. Le cornici della storia.* Milano: Bruno Mondadori, 2007, pp. 195-196.

³⁸ See: De Simone, Rosario: *Ch. E. Jeanneret-Le Corbusier: viaggio in Germania 1910-1911*. Roma: Officina Edizioni, 1989. p. 110.

reality. It is virtually reduced to an elevation, to a flat representation of the modules and geometries that regulate its dimensions and proportions. After a few steps toward it, the large window on the dining room restores the third dimension to the long rectangle but always as an image behind the glass, this time literally.

The front door leads into a different dimension, like passing behind the scene of a theatre and invokes an impossible panoramic overview of the long transverse volume, similar to what can be experienced by entering the church of the Monastery of La Tourette. The viewer is thus forced to rotate his/her gaze and can grasp only parts of the interior space engulfed by the upper *soupente*. The double height not only serves to direct the field of view but also to offer an aesthetic and pedagogical experience³⁹. Only beyond the lower ceiling perspective view is fully back and one might exclaim: "the four oblique lines of a perspective! The room is installed in front of the site. The whole landscape enters the room" under a generous portion of the sky. Paraphrasing Reichlin's words for the preliminary design of Villa Stein, "by following the path of the *promenade* the visitor catches then, from time to time or simultaneously, the vertical cross-section, the horizontal section, the interior, the exterior, the volume, etc. the *terrasse jardin* - namely, *the constant and invariant features of the architectural object*" But even this view is still a representation, however, divided into an altarpiece or in a comic book panel by the window mullions. To definitely escape from the fictive world of the Brewer House one would need to go out on the balcony: in fact the vertical glass coincides with the perspective plane before the ramp and by trespassing it the viewer gets back literally and metaphorically the freedom to move and observe without filters but having learned to see.

Of course, such a metamorphic transfiguration of physical things into pictures and then *images* is part of a mental journey that needs the contribution of the spectator, as specifically required by Le Corbusier himself: "We can create symphonies. To be soothed by certain forms, to realize how they were conceived, by what relationships they were brought together, how they answer to a need which has become articulate, how they rank in one's personal scheme of chosen images. To measure, to compare indeed; to share with their creator his raptures and his torments..."

142. He clearly asked the spectator to become an actor, to measure and compare with his/her body, and invoked personal imagery to *give* sense to the work. Thus such an assemblage house performs also an intertextual action: it is a text speaking *of* and *to* other texts.

Through the abstraction of its forms, the house works as a representation to involve the mind and the body of the spectator; despite the abstraction of its forms, there are always elements that explicitly refer to the monuments of the past Le Corbusier sketched on his early notebooks. From this point of view, many of his houses could be included in the category *collection* as intended by Charles Moore⁴³ to describe the gardens that have the ambition to gather models of faraway places. Some historical references of the Brewer project have already been mentioned, and others could be more or less arbitrarily cited as the sanctuary at Palestrina, the Vatican Belvedere, the Charterhouse of Ema, the walls of Vesuvian villas with tree tops sprouting above them, the ramps of the Roman palaces, etc. But while in his earlier works the relations appear direct and sincere to the limits of

⁴² Le Corbusier, *The City of Tomorrow*, op. cit., p. 62.

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³⁹ As confidentially suggested by Le Corbusier's follower Henri Ciriani, it is important to offer those who grew up in a home the experience of different points of view to frame things, physically and consequently, mentally. Henri Ciriani, interview with the author, April 4, 2007.

⁴⁰ Gresleri, Giuliano; de Pierrefeu, Francois, Le Corbusier: *La casa degli uomini*. Milano: Jaca Books, 1985, p. 97. Le Corbusier's words actually commented his famous sketch of Rio de Janeiro.

⁴¹ Reichlin, op. cit., p. 194 (Italic in the text).

⁴³ Moore, Charles W.; Mitchell, William J.; Turnbull, William, Jr.: *Poetics of Gardens*. Paperback edition. Cambridge: MIT Press, 1993, p. 79.

the unconsciousness, in the President's House they appear mischievously mediated by solutions developed in his previous works. Of course, this is a project developed within a few hours and he could not help picking up prepared solutions from his repertory: almost the result of an automatic design / drawing session that indirectly reveals the continuous underground metamorphic process affecting his previous designs⁴⁴. For example, the basement reminds the attic of Villa Stein, the ramp is reminiscent of the Maison de Week-end at Rambouillet while the double-height living room slavishly follows the interior of Pavilion de L'Esprit Nouveau, at the time generally acclaimed by American critics⁴⁵. This process testifies not only an instinctive form of economy as a way to recover or recycle solutions from the repertory but a form of aware mannerism that here seems to turn into a self-quoting propaganda by densifying the network of formal relationships between his works in order to increase his fame.

The house is consequently primarily an intertextual⁴⁶ work, which implicitly relies on a "cooperative interpretation",⁴⁷ by the viewer to complete and give sense to its parts. The same choice to present the project in the form of sketches on the *Oeuvre Complete* emphasizes not only the importance Le Corbusier attributed to this design, even for possible future applications, but that implicitly the rough or missing elements could be reconstructed by the reader by referring to the repertoire of drawings and photographs in the previous pages. Even this apparently innocent choice has the indirect consequence to confuse the threshold between actual and virtual, between real and representation, like in many other parts of his books⁴⁸.

5. Conclusions

Le Corbusier's travel to United States was quite a total fiasco and the project offered to Brewer was not realized as well as generally ignored by critics. Yet it is a significant event for both the special conditions in which it was designed and the architectural and even urban values it expresses. The theme of the house for the president of a college must have appeared to Le Corbusier in fact as an extraordinary opportunity to combine intensive studies on contemporary house with the idea of an initiatic and educational architecture inside a micro-urban community.

The house both is and looks like a Le Corbusier's house and, despite the original volumetric configuration, it establishes close relationships with his earlier works, especially with single-family residences of the twenties. Its role can be further clarified by the comparison with an episode of his travel to Latin America. During one of his public meetings, he proposed a design for a housing development to be completed by 17 replicas of Villa Savoye⁴⁹. In that case he had chosen to turn his most famous work - the result of a sophisticated tailoring design to the needs of the Savoye family - into a prototype for an housing development, offering his potential clients an already finished product to be sold. With the house for Joseph Brewer Le Corbusier changed his approach: he

⁴⁴ Quetglas noted that during the Princeton lecture Le Corbusier had drawn a plan of Villa Savoye differing from the built version, as if the architect had not stopped its formal development. Quetglas, op. cit.

⁴⁵ A *New York Times* anonymous reporter suggested a direct relationship between the "modern villa" full of "light, air and space", and the "American engineering". "Art of the Day in Many Galleries". In *New York Times*, 16 March 07, 1926.

⁴⁶ See: "Le Corbusier. L'atelier intérieur". *Le Cahiers de la recherche architecturale et urbaine*, février 2008, n. 22/23. Paris: Editions du patrimoine - Centre du monuments nationaux, 2008.

⁴⁷ The definition comes from Eco, Umberto: *Lector in Fabula. La cooperazione interpretativa nei testi narrativi*. Milano: Bompiani, 1979.

⁴⁸ See: Naegele, Daniel: "Savoye Space. The Sensation of the Object". In *Harvard Design Magazine*. 2001, N° 15.

⁴⁹ Project d'adaptation de cette type de maison pour l'Argentine, aux environs de Buenos Aires... Le Corbusier; Jeanneret, Pierre. Oeuvre Compléte. Volume 2. 1929-1934. 15th edition. Basel – Boston – Berlin: Birkhäuser Publishers, 2006, p. 28.

did not offer any more a post-Palladian monolith valid for any geographical and settlement condition but designed a building to respond both to functional and environmental requests of the college; moreover he conceived its form as the result of an assemblage of modular parts and solutions previously tested. More than a product Le Corbusier therefore offered a process and validated his proposal by citing recognizable elements out of his repertoire, as the *floating box*, the ramp, the strip window and the double height living-room: a process to convert with the "timid" American people to his own idea of modern life by revealing the potential of their own production processes and maliciously requiring their collaboration for deciphering all the layered meanings of his work. The house is therefore a sort of full-scale model and this fictitious atmosphere is declined throughout the *promenade architecturale* regulating the space exploration and turning the building into an educational device for the students and intellectuals who would follow the occult choreography of the Swiss master.

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